DETAILED ACTION

Status of the Claims

1. The following is a **FINAL** Office action in response to Applicants submission received on 11/18/2009.

2. Claims 1, 2, 6, 7, 30, 31, 35 and 36 have been amended. Claims 11 - 29 were withdrawn from consideration. No new claims were added or canceled.

3. Claims 1 – 10 and 30 – 39 are currently pending and have been examined.

Restriction Requirement - Response to Arguments

4. Applicant's election of claims 1 - 10 and 30 – 39 and maintained traverse is herein acknowledged. The Examiner directs Applicant to the previous Office action, noting the Examiner has provided a response to Applicant's traverse which is herein incorporated by reference. The Restriction Requirement is still maintained and was previously made **FINAL**.

Response to Amendments

5. Applicant's amendments to claim(s) are herein acknowledged. As a result, the Examiner withdraws the previous rejection under § 112 and has entered a new rejection under § 112. Further, the Examiner has maintained the rejection under § 101. Further, the Examiner has maintained the rejection under § 103.

Response to Arguments

6.   Applicant's arguments received on 11/18/2009 have been fully considered but
they are not persuasive. Applicants argues:

> i) Rejections under § 112 have been overcome.
>
> ii) Rejections under § 101 should be withdrawn.
>
> iii) Van Huben does not disclose or teach the amended workflow for
> Data Management.

In response to Applicant's argument that the rejections under § 112 have been
overcome, the Examiner respectfully agrees. Therefore, based on Applicant's
amendments to the claims, the rejections under § 112 are herein withdrawn.

In response to Applicant's argument that the rejections under § 101 should be
withdrawn, the Examiner respectfully disagrees. As noted by Applicant [*sic*] "[c]laims 1 –
10 are *inter alia*, clearly directed to a system and claims 30 – 39 are clearly directed to a
workstation." The Examiner agrees that both claims 1 - 10 recite a system in the
preamble and further recites that "rules are set for said system", however none of the
modules recited in the body of the claim are tied to structural components of the system
and the nominal recitation of a user interface fails to render the claims statutory under §
101. The recited modules may reasonably be interpreted to be directed to software *per
se* and hence the claims are not statutory. Claims 30 – 39 suffer from similar defects.

In response to Applicant's argument that Van Huben does not disclose or teach
the amended workflow for Data Management, the Examiner respectfully disagrees, see

Claim 1 *infra*. The Examiner notes that Van Huben discloses lexical and semantic parsing of data to determine relevance, content, versioning, and distribution of information to individuals of the organizations based on business rules. Van Huben discloses both manual and automated methods for entering and parsing data ensuring proper object associations, routing, etc.

Rejections under § U.S.C. 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 30 – 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 30 recite "business rules for said system". However the claim is directed towards a workstation. It is not clear whether the limitation is directed towards a different system or the workstation. Therefore, the claim is vague and indefinite. The Examiner has interpreted the limitation to be directed towards the workstation recited the preamble. Appropriate correction is required. Claim 35 suffers from a similar defect. Claims depending form claims 30 and 35 are rejected based on their dependency on a rejected claim.

Rejections under § U.S.C. 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9.   Claims 1-10 and 30-39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10.   Claims 1-10 and 30-39 are directed to an apparatus. However, the recited components of the apparatus appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under § 101. Therefore, these claim limitations can be reasonably interpreted as computer program modules or software *per se*. The claims are directed to functional descriptive material *per se* and hence non-statutory. The modules (i.e. software applications) recited in the claims are not tied to any hardware and therefore the claims are not statutory under § 101.

Rejections under § U.S.C. 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 1-10 and 30-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Huben et al., US 5,950,201, (herein Van Huben), in view of Williams et al., US 6,766,205, (herein Williams).

Claim 1

Van Huben discloses a system for collaborative engineering, said system comprising:

- *a user interface* (see FIGs 1 and 2 and associated text; noting "GUI" and "machine to person interface".).

- *an open architecture module that receives and provides data in its native format* (see FIG 2 and associated text; noting the data management system provides data in a plurality of formats. Further noting Section 1.3 "Data Types". Further see column 11, lines 12-35; noting the module allows creation or importing of data files by users and allows data file to be accessed from the library in native format (i.e. original version) and/or updated versions.);

- *an autonomous agent module for setting business rules for said system, setting and responding to trigger criteria, and gathering the data provided by the open architecture module* (*The Examiner notes that the recited intended use of the autonomous agent module does not further limit the structure or function of the module and therefore is not afforded any patentable weight. However, in an effort

to advance prosecution; see FIGs 8a and 8b; noting rules for "Design Fix Management" and "Engineering Changes" are set and applied. Further noting, "design rules" are business rules that are applied to component selection based on manufacturability, specification limits and the like. Even further noting design component rules are set and when an association rule has been violated a n alert and report are sent to relevant modules, repositories, personnel, etc. Further see *inter alia* column 73, line 60 *et seq.* and column 74, line 1-14; noting in an exemplary embodiment a BOM is configured with a time tracker that monitors versions and data associated therewith. The BOM tracker sends alerts to the Integrator when a version becomes obsolete (i.e. trigger that is set and responded to). Further noting, data is provided to the appropriate repositories.);

- *a workflow manager module that polices and enforces the business rules in regard to data routing so that individual departments, organizations, and individuals are notified that the data was provided by the open architecture module and performs specific tasks in an order in accordance with the business rules set in the autonomous agent module* (see FIG 10 and associated text; noting the "Data Manager" enforces rules for types of data, locations, access, control and the like. Further noting "Library Management" provides for routine data control functions including ownership of the data and provides "instant notification" to the data owner when a task is executed.);

- *said specific tasks including storage of said data gathered by said autonomous agent module* (see column 10, lines 22-53; noting data is segregated and stored in a library residing on the server.);

- *upon storage, delivering data objects derived by lexical analysis from said data gathered by said autonomous agent module* (*Id.* Further, see column 11, line 12 *et seq.*; noting when the system important files an application program is executed thereby parsing the into the appropriate fields including data object name, object location, type of type, users associated with the object, versioning information, etc.);

- *delivering said data objects to selected ones of said individual departments, organizations and individuals based on semantic parsing of said data objects and said business rules* (*Id.* Noting, users associated with the parsed file are associated with the data object based on the executed application which executed the rules (code) defined by the Data Manager. Further, see column 12, line 59 *et seq.* and column 13, lines 1-4; noting the automated library then delivers data objects (tasks) to users that are associated with specified tasks defined by the semantic parsing executed by the application.)

- *an infrastructure connectivity module* (see FIG 1 and associated text; noting the "Local Area Network" is an infrastructure connectivity module that provides a means for linking communications.);

- *a report engine module for extracting, formatting, and delivering data routed by the workflow manager module* (see FIG 16 and associated text; noting the "Data

Management System" controls routed data, versioning, data structures. Further

noting, the "Package Manager" provides reporting functionality.);

- *a root cause analyzer module for analyzing data routed by the workflow manager*

  module, setting an alarm level to detect unwanted occurrences in the data,

  setting exclusions for the detection of unwanted data, determining the cause of

  the unwanted occurrence, and removing the cause of the unwanted occurrence

  (see FIGs 8a and 8b and associated text; noting; the module detects a violation

  of rules, identifies which design rule has been violated and applies a "Design Fix"

  by either removing the component or moving the component. Although Van

  Huben discloses the limitations *supra*, the Examiner also notes that the recited

  intended use of the root cause analyzer does not further limit the structure or

  function of the module and therefore is not afforded any patentable weight.);

Van Huben discloses using component data to allow or exclude components

from a product design however Van Huben does not explicitly recite, but Williams

teaches:

- *a data mining module that look for trends and anomaly in the data* (see FIG 11

  and associated text; noting data is compiled and anomalies "HIGH and "LOW" in

  respect to control limits are recorded. Further, see FIG 13 and associated text;

  noting trends in data a graphed.).

It would have been obvious to a person of ordinary skill in the art, at the time of

the invention, to combine the collaborative engineering system of Van Huben with the

data mining module of Williams to provide a predictably resulting system that utilizes

data trends and anomalies to aid in product design. Further, the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 2

Van Huben/Williams teaches the limitations above. Furthermore, Williams teaches:

- *wherein the autonomous agent module analyzes the data for compiling trend information regarding the data* (*Id.* at **Claim 1**).

It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to combine the collaborative engineering system of Van Huben/Williams with the data analyzing module of Williams to provide a predictably resulting system that utilizes data trends and anomalies to aid in product design. Further, the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 3

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben discloses:

- *wherein the autonomous agent module executes a predetermined action if the*
  trend information meets a trigger criterion (see FIGs 8a and 8b and associated
  text; noting; the module detects a violation of rules, identifies which design rule
  has been violated and applies a "Design Fix" by either removing the component
  or moving the component. The Examiner notes that the action may include
  informing the data owner of the violation, executing an automated script, etc.).

Claim 4

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben
discloses:

- *wherein the predetermined action is to notify a designated user that the trend*
  information met the trigger criteria (*Id.* at **Claim 1**. Further noting, "alerts the
  user".).

Claim 5

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben
discloses:

- *wherein the predetermined action is to execute a change affecting at least one of*
  the group consisting of: the open architecture module, the autonomous agent
  module, the workflow module, the infrastructure connectivity module, the report
  engine module, the root cause analyzer module and the data mining module (*Id.*
  at **Claim 1**; noting changes include changing the flow of work, allowing a violation

of rules for an EC; change in the data version, etc. All of the aforementioned

changes "affect" at least one of the "modules").

Claims 6-10 and 30-39 recite limitations addressed in the claims above. Therefore,

claims 6-10 and 30-39 are rejected for similar reasons.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Brett Feeney** whose telephone number is **571.270.5484.** The Examiner can normally be reached on Monday-Thursday, 7:30am-6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **BRAD BAYAT** can be reached at **571.272.6704**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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 Any response to this action should be mailed to:

                         Commissioner of Patents and Trademarks
                         Washington, D.C. 20231

                         or faxed to **571-273-8300**.

 Hand delivered responses should be brought to the **United States Patent and
Trademark Office Customer Service Window**:

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